

# Lockout/Tagout Program

The Lockout/Tagout Rule requires employers to establish a written program and utilize procedures for affixing appropriate lockout/tagout devices to energy isolating appliances. These devices include electrical circuit breakers, disconnect switches, as well as other tools that physically prevent the transmission or release of energy. Occupational Safety and Health Administration (OSHA) developed the Lockout/Tagout Rule to prevent injuries from occurring while machines are being serviced or maintained.

Vehicle maintenance shops may do the servicing or maintenance on their own equipment or may have these duties contracted out. In either case, it is essential that all workers understand that a potentially dangerous condition exists whenever a machine is being serviced, and the people who normally operate the equipment are unaware of this activity.

Locks and tags are used to prevent people from inadvertently starting machines or equipment when they are being serviced. When a lock is used on energy isolating devices (EID), such as circuit breakers, on-off switches, or plugs, it will physically prevent anyone from turning on the system. If the EID is capable of being locked out, it must be locked out (rather than merely tagged.) All newly installed equipment must be capable of being locked out. Under unusual circumstances, when a lockout device cannot be applied to a piece of machinery or equipment, a tag system may be utilized by the employer if they can demonstrate that an equal level of safety is achieved using a tagout procedure. If necessary, chains, wedges, blocks, or other hardware should be used to restrain energy.

Lockout/Tagout actions should be implemented whenever servicing and maintenance activities are being performed, which include: constructing, installing, setting-up, adjusting, inspecting, or modifying any equipment.

OSHA's Lockout/Tagout Program does not apply when minor adjustments and servicing tasks take place during normal production operations. These activities are not covered by this standard if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures which provide effective protection.

## Responsibility

All employees shall be instructed on the safety significance of the lockout/tagout procedure. The employer must, at no cost to each authorized employee, furnish the necessary items to effectively carry out these procedures. The initial training on lockout/tagout should be given during employee orientation. Additional training will be given to authorized and affected employees when the employee is assigned to a job that requires direct use of lockout/tagout procedures. All employees must be able to recognize lockout/tagout equipment and shall be updated annually on new procedures. In this case, as in all others, training should be documented and updated as conditions change.

## Classifications

All employees are placed in one of three categories:

Authorized: Any employee whose job requires them to do servicing or maintenance on any machine and while performing these functions, puts themselves in a potentially hazardous position.

Affected: Any employee who, during normal job duties, will be affected by the locking or tagging out of a machine they work on.

Other: Any employee whose specific job assignment is not affected by a machine's shut down.

## Preparation for Lockout/Tagout

Before starting any service or maintenance on a piece of equipment, all authorized employees involved in the repair or maintenance will make a visual survey to locate and identify all energy sources. This is done to ensure that all appropriate energy sources are properly locked or tagged out. On many machines, there may be more than one source of energy.

## Sequence for Lockout/Tagout

1. Notify all effected employees that a lockout/tagout procedure is going to be used on the machine and the reason for it.
2. If the machine or equipment is being operated, shut it down by normal stopping procedures.

3. Go to the energy source and operate the switch, valve, or other energy disconnect so the equipment is isolated from its energy source.
4. Stored energy such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, air, gas, steam or water pressure, must be dissipated by bleeding off or restrained by methods such as repositioning, strapping or blocking.
5. Lockout or tagout the energy isolating devices (valves, switches, etc.) with individual locks and tags.
6. After ensuring that no personnel are exposed, attempt to restart the machine using normal operating controls to make certain that the machine will not operate. **CAUTION: MAKE SURE TO RETURN OPERATING CONTROLS TO “OFF” OR “NEUTRAL” POSITION AFTER TEST.**
7. The machine is now locked and tagged out.

#### Restoring machine or equipment to normal production

1. After the maintenance is completed and the equipment is ready for normal production, check the area around the machine to ensure that no one is exposed to an unsafe situation during restart.
2. Check to make sure all tools and supplies are removed from the machine.
3. Make sure all guards and safety equipment are reinstalled.
4. Notify all effected personnel that the machine is about to be re-energized.
5. After making sure the machine controls are in the “off” or “neutral” position remove lock and tag and re-energize machine.

#### Group lockout

When servicing and/or maintenance is performed by two or more individuals, they must utilize special procedures.

1. Responsibility. Primary responsibility for the lockout is vested in one employee working on that particular job. This employee will maintain responsibility throughout the project.
2. Multiple individual locks. Each authorized employee shall affix a personal lockout/tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work, and shall remove those devices when their job is completed on that project.

#### Shift or personnel changes

1. When a shift or personnel change occurs, a designated employee shall insure the continuity of the lockout/tagout protection.
2. The designated employee shall provide for the orderly transfer of lockout or tagout devices between off-going and oncoming employees.

#### Procedures to take if Lockout/Tagout cannot be accomplished

1. Notify all effected employees that maintenance or repair of machinery is going to take place.
2. All effected employees must acknowledge this information (either verbally or in writing.)
3. The machine is then stopped (shutdown) and the energy source removed, if possible.
4. Follow procedures to dissipate energy as indicated above.

#### Outside Contractors

When outside contractors are doing maintenance or repair work on your equipment, they must demonstrate their lockout/tagout procedures to all effected employees. If the contractor's work is unrelated to your operation (i.e., plumbing, heating and cooling, air monitoring, etc.), the operator must inform the contractor of the potential hazards of the equipment (and chemicals) in the area.

This entire program shall be reviewed on an annual basis and upgraded when necessary.

A more detailed guide covering the development of a Lockout/Tagout Program is available from the Bureau of Safety Education and Training (BuSET.)

This guide is available free of charge and may be obtained by calling BuSET at (317) 232-2688 or by using the BuSET order form on the Fax-On-Demand system.